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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/663,088	09/15/2000	Dr Uwe Schilling	00671384	3480

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EXAMINER	
GIBSON, ERIC M	

ART UNIT	PAPER NUMBER
3661	

DATE MAILED: 08/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/663,088	SCHILLING, DR UWE	
	Examiner	Art Unit	
	Eric M Gibson	3661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 October 2002 (re-filed 3/11/2003)* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *26 March 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/21/2002 (re-filed 3/11/2003) has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 5-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. Claim 5 recites the limitation "wherein the type of vehicle can be selected" in line 1-2. There is insufficient antecedent basis for this limitation in the claim. There is no previous recitation of “type of vehicle” in the claims.

b. Claim 6 recites the limitation "the information about the duration of time for which the traffic restrictions are applicable is stored" in line 2-3. There is insufficient antecedent basis for this limitation in the claim. There is no previous recitation of “the information” in the claims.

c. Claim 7 is necessarily rejected as being dependent upon a rejected base claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of Desai et al. (US005862509A) and Vaughn (US005485161A).

a. The applicant teaches that a central processor connected to an input unit and an output unit, to position determination means and to a storage element for map data, and means for associating an ascertained vehicle position with a data record, stored in the storage element of the map data is known prior art (specification, page 1), for example EP 0363396B1. The known prior art does not teach storing information about traffic restrictions, wherein the relevant restrictions are displayed on the display unit. Desai teaches a navigation system for a motor vehicle wherein traffic restrictions (see column 1, lines 41-46) are stored in a memory (263, figure 11) and displayed on a display unit (267, figure 11), which displays an alphanumeric description of the route segments (column 12, lines 17-20). Desai also teaches that it is desirable to include the traffic restrictions in the map database so that route planning is not penalized or constrained (column 1, lines 47-67). However, Desai does not teach constantly

displaying traffic restrictions on the vehicle display. Vaughn teaches a method of vehicle navigation that includes displaying a vehicle's speed and the posted speed limit for the applicable route section (column 9, lines 10-11) in order to prevent a vehicle from exceeding the speed limit. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to include the traffic restrictions as taught by Desai, displayed in the manner described by Vaughn in order to enforce the traffic laws, in the system of the known prior art, in order to offer greater flexibility in route planning.

4. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Desai, Vaughn and the admitted prior art as applied to claim 1 above, and further in view of Barnea et al. (US005412573A).

a. As per claim 2, the combination teaches the invention as explained in the rejection of claim 1. The combination does not teach that traffic restrictions are speed restrictions. Barnea teaches a map database for use in a navigation system for a vehicle, wherein the map database includes traffic restrictions (column 5, lines 7-10). An included field in this database is a speed limit field 209 (column 5, line 17). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to include speed restriction data in the system taught by the combination, in order to further aid in route planning, as taught by Barnea.

b. As per claim 3, the combination teaches the invention as explained in the rejection of claim 1. The combination does not teach that traffic restrictions are length, width, height or weight restrictions. Barnea teaches a map database for use in a navigation system for a vehicle, wherein the map database includes traffic restrictions

(column 5, lines 7-10). Included fields in this database are maximum allowable vehicle weight 213 and maximum allowable vehicle height 215 (column 5, line18-21). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to include height or weight restriction data in the system taught by the combination, in order to further aid in route planning, as taught by Barnea.

5. Claims 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Desai, Vaughn and the admitted prior art as applied to claim 1 above or the combination of Barnea, Desai, Vaughn, and the admitted prior art as applied to claims 2 and 3 above, and further in view of Bremer et al. (US005184123A).

a. As per claim 4, the combination teaches the invention as explained in the rejections of claims 1, 2 and 3 above. The combination does not teach that the traffic restrictions are for a particular type of vehicle. Bremer teaches a navigation system for use in a vehicle, wherein the traffic restrictions are associated with a particular type of vehicle (column 4, lines 50-54). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to include traffic restrictions for a particular vehicle in the system of the combination, as taught by Bremer, in order to further aid in route planning.

b. As per claim 5, the combination teaches the invention as explained in the rejections of claims 1, 2 and 3 above. The combination does not teach that the type of vehicle may be selected and only the traffic restrictions relevant to the selected vehicle are displayed. Bremer teaches a navigation system for use in a vehicle, wherein a type of vehicle is selected (column 4, lines 35-37) and the traffic restrictions associated with

that particular type of vehicle are displayed (column 4, lines 50-54). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to include traffic restrictions for a selected type of vehicle in the system of the combination, as taught by Bremer, in order to further aid in route planning.

c. As per claim 6, the combination teaches the invention as explained in the rejection of claim 5 above. In addition, Desai has already been cited for teaching traffic restrictions that are time dependent.

d. As per claim 7, the combination teaches the invention as explained in the rejection of claim 6 above. In addition, Desai teaches time measurement means and means for displaying the applicability of the restriction at the present time (column 8, lines 42-57).

6. Claims 8 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Desai, Vaughn and the admitted prior art as applied to claim 1 above or the combination of Barnea, Desai, Vaughn, and the admitted prior art as applied to claims 2 and 3 above, and further in view of Ebner et al. (EP0697580A1).

a. As per claim 8, the combination teaches the invention as explained in the rejection of claim 4. The combination does not teach that a mobile telephone can be connected to the navigation system. Ebner teaches a navigation system wherein a mobile telephone (T) can be connected in order to receive updates from a central location (Sp). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to include a mobile telephone in the system of the combination, as taught by Ebner, in order to receive map database updates from a central location.

b. As per claim 11, the combination teaches the invention as explained in the rejection of claim 8. Furthermore, Desai teaches that the data transfer is accomplished through a wireless radio channel (275, figure 11) from a base station (30, figure 11).

7. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination as applied to claim 8 above, and further in view of Meek (US006182006B1).

a. As per claim 9, the combination teaches the invention as explained in the rejection of claim 8. The combination does not teach that the mobile telephone can be connected to the navigation system via a wireless connection. The use of wireless communications interfaces is well known in the prior art. A typical wireless connection is usually via an IR interface. Meek is exemplary of a system employing a navigation unit (100, figure 2) that communicates via wireless connection (152, figure 2) to a remote unit. This allows the remote unit to provide data to the in-vehicle unit while still retaining its portability. It would have been obvious to one of ordinary skill in the art, at the time of the invention, to use this type of connection with a mobile telephone in the system as taught by the combination, in order to retain the portability of the mobile telephone.

8. Claims 10 and 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Desai, Vaughn and the admitted prior art and further in view of Ebner et al. (EP0697580A1).

a. As per claim 10, the applicant teaches that a central processor connected to an input unit and an output unit, to position determination means and to a storage

element for map data, and means for associating an ascertained vehicle position with a data record, stored in the storage element of the map data is known prior art (specification, page 1), for example EP 0363396B1. The known prior art does not teach storing information about traffic restrictions, wherein the relevant restrictions are displayed on the display unit. Desai teaches a navigation system for a motor vehicle wherein traffic restrictions (see column 1, lines 41-46) are stored in a memory (263, figure 11) and displayed on a display unit (267, figure 11), which displays an alphanumeric description of the route segments (column 12, lines 17-20). Desai also teaches that it is desirable to include the traffic restrictions in the map database so that route planning is not penalized or constrained (column 1, lines 47-67). However, Desai does not teach constantly displaying traffic restrictions on the vehicle display. Vaughn teaches a method of vehicle navigation that includes displaying a vehicle's speed and the posted speed limit for the applicable route section (column 9, lines 10-11) in order to prevent a vehicle from exceeding the speed limit. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to include the traffic restrictions as taught by Desai, displayed in the manner described by Vaughn in order to enforce the traffic laws, in the system of the known prior art, in order to offer greater flexibility in route planning. Desai further teaches that the data transfer is accomplished through a wireless radio channel (275, figure 11) from a base station (30, figure 11), but does not specifically teach a mobile telephone. Ebner teaches a navigation system wherein a mobile telephone (T) can be connected in order to receive updates from a central location (Sp). It would have been obvious to one of ordinary skill

in the art, at the time of the invention, to include a mobile telephone in the system of the combination, as taught by Ebner, in order to receive map database updates from a central location.

b. As per claim 12, Desai teaches that the traffic restrictions are used in route calculation (column 2, lines 24-40).

c. As per claim 13, Desai teaches that the position determination system includes a receiver for satellite data (column 3, lines 7-9).

d. As per claim 14, Desai teaches optionally including an inertial system for position determination (column 3, lines 9-10).

e. As per claim 15, Desai teaches outputting the traffic restrictions audibly (column 8, lines 42-45).

Response to Arguments

9. Applicant's arguments filed 10/21/2002 (re-filed 3/11/2003) with respect to claims 1-15 have been considered but are moot in view of the new ground(s) of rejection.

a. Applicant has failed to address the rejection of claims 5-7 under 35 U.S.C. 112, second paragraph, initially made in the Office Action mailed 1/2/2002 (Paper No. 7), and repeated in every Office Action thereafter. Failure to address the rejections in any subsequent responses will result in holding the reply non-responsive.

b. As per Applicant's first point, that the TTR and TLR of Desai are specifically excluded by the Applicant's special definition of traffic restrictions (page 4 of Paper No. 17), the Examiner disagrees. The invention of Desai specifically

differentiates between a permanent type of traffic restrictions blocking all access to vehicles that the Applicant's invention excludes and timed restrictions (column 1, lines 29-34). The Applicant's definition of traffic restrictions also includes time dependent traffic restrictions (Specification, page 5). In the invention of Desai, the timed turn and lane restrictions do not constitute complete blocking or unavailability to vehicle access. They are restrictions on turns and use of vehicle lanes, including HOV or "car-pool" lanes that would allow access to the roadway to vehicles matching that criteria, therefore are within the definition of traffic restrictions as stated in the Applicant's specification.

c. As per Applicant's second point, that Desai fails to teach that the displayed restrictions are shown in alphanumeric format on the display, the teaching of Vaughn has been included to teach this limitation. Desai teaches a graphical display of the restrictions in the form of highlighted arrows (column 8, lines 47-53). This type of display format best fits the type of restriction being displayed. In displaying other types of restrictions, such as speed limits taught in the prior art, a different display format is desirable, as evidenced by the alphanumeric display format in Vaughn.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ayanoglu et al. (US005689252A) teaches a navigation system for an automotive vehicle that takes into account road speed limits in determining the travel route.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric M Gibson whose telephone number is (703) 306-4545. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Cuchlinski can be reached on (703) 308-3873. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7687 for regular communications and (703) 305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

MICHAEL J. ZANELLI
PRIMARY EXAMINER

EMG
August 11, 2003